

Interventions focusing on promoting DSME and overcoming the barriers of DSME should be designed.

PHS51

DETERMINATION OF ADHERENCE TO PHARMACOTHERAPY ANTIRETROVIRAL IN HIV+ PATIENTS BY THE REGISTRATION DISPENSATION

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OBJECTIVES: This quantitative study aimed to determine the degree of adherence to antiretroviral therapy (ART) by recording dispensation in HIV-infected patients attending in a reference for Secondary Center Health in Fortaleza, Ceará, Brazil. Monitoring of adherence should be a strategic goal in caring for patients infected with HIV. **METHODS:** A Pharmaceutical Care Service in José de Alencar Specialty Medical Center (JAMSC) were recruited in 100 naïve patients starting antiretroviral therapy between December 2008 and February 2012. These were evaluated monthly for 09 months as adherence through the registry to ARV Dispensing Service Pharmacy and classified according to the scale of Steiner (1988) and adapted by Saldanha et al (2009) as to their profile. This study was approved by the Ethics Committee of the Federal University of Ceará. Data analyzed in Excell and SPSS[®]. **RESULTS:** The profile analysis showed that most patients were male (62%, n=62), single (55%, n=55) and were living with their family (66%, n=66). Regarding adherence, 84 patients (84%) were classified as Good Adherence - less than 29 days late (>95% adherence) and 06 infected (06%) in Critical Zone - between 29/74 days late (between 95 - 70% compliance), ten patients with Bad Adherence - more than 74 days late (<70% adherence) and no patient had more than 180 days late to receive ARVs, with no interruption of treatment for this classification. **CONCLUSIONS:** Pharmacy records are important indicators of potential non-adherence and should be incorporated in such clinical practice. The pharmaceutical and clinical attention in the care and treatment of the infection by the HIV should be prioritized to reach out to poor compliance and adherence or irregular patients with ARV pickups.

PHS52

DETERMINANTS OF UTILIZATION OF A NO-COST HIV TRANSITION CLINIC IN UGANDA: A CROSS SECTIONAL STUDY OF YOUNG ADULTS LIVING WITH HIV/AIDS

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OBJECTIVES: To understand the levels and determinants the HIV Transition Clinic services utilization by young adults at Infectious Diseases Institute, Kampala, Uganda. **METHODS:** A cross sectional study using quantitative methods at a HTC in a sample of 379 young adults living with HIV/AIDS (YALHA) between the ages of 15-24 years. At analysis utilization was categorized into two levels; regular (kept all appointment visits) and irregular (missed one or more appointments visits) utilization. Univariable, bivariable and multivariable logistic regression was used to establish determinants associated with utilization of the HTC. **RESULTS:** Of the 379 total respondents, only 32.4% were regular utilizers of the HTC. There are low levels of regular utilization of the HTC. Female young adults have better service utilization rates compared to the males in HTC. The male to female ratio was 1:5. The determinants of HTC regular utilization were CD4 cell count category of 250-2603/μl (AOR 0.58, 95%CI: 0.36-0.95), not currently on ART (AOR 0.27, 95%CI: 0.15-0.47) and did not receive counseling services (AOR 0.47, 95%CI: 0.27-0.83). **CONCLUSIONS:** The factors that were associated with reduced the chance of regular use of the HTC were: CD4 cell count between 250-2603/μl; not being on ART; and not receiving HIV counseling services. The young adults in the HIV transition clinic should be screened on a regular basis to detect those with a CD4 cell count of <350/μl and counseled for early initiation of ART so as to enhance regular HIV transition clinic utilization. In addition a reminder system like peers, family and mobile phone messages should be set up for young adults so that they are reminded of their appointments hence facilitating regular use of the transition clinic.

PHS53

DETERMINANTS ON COMPLIANCE OF METHADONE MAINTENANCE TREATMENT IN SHANGHAI, CHINA

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OBJECTIVES: The methadone maintenance treatment (MMT) program has been implemented in Shanghai since 2005. The MMT has served to provide the government departments with the necessary MMT compliance and retention data to assist in facilitating decision-making related to the development of management and intervention strategies. Our study has portrayed the trend of MMT compliance and retention and has also served to identify related predictive factors of individuals enrolled in the MMT program. **METHODS:** A retrospective evaluation was performed using data from the Shanghai component of the National MMT data management system (a prospectively collected database) between January 1, 2005 and December 31, 2011. The primary outcome measured was the dropout of individuals from the MMT program and defined as methadone dosing records that were missing for >30 continuous days. A cox model for recurrence events was utilized in order to estimate a hazard ratio (HR) predicting dropout rates during the follow-up period. **RESULTS:** A total 6169 individuals were cumulatively enrolled; 63% dropped out of the program at least once (ranging from 1 to 10 times), and 74% of them did not return until the end of this study. Our adjusted analyses demonstrated that the dropout occurring was more likely to occur among younger individuals (<30 years versus ≥50 years old, HR=1.48, 95%CI: 1.22-1.81), participants from ethnic minorities (HR=1.48, 95% CI: 1.06-2.06), those who were less educated (HR=1.31, 95%CI: 1.04-1.66), those

sharing needles with others (HR=1.25, 95%CI: 1.01-1.53), those whose urine tested positive for opiates (HR=2.68, 95%CI: 2.43-2.97), and those who had a low average methadone dose in the initial treatment week (<20mg versus ≥60mg, HR=1.79, 95%CI: 1.40-2.28). **CONCLUSIONS:** Shanghai is facing the challenge of maintaining a high MMT retention rate. Comprehensive interventions should be considered among specific populations, such as the young, poorly educated, opiate-positive individuals and injection drug users.

PHS54

INFLUENCE OF PHARMACIST MEDIATED MEDICATION COUNSELING ON MEDICATION ADHERENCE BEHAVIOR IN HYPERTENSIVE PATIENTS AT A SOUTH INDIAN TERTIARY CARE TEACHING HOSPITAL

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OBJECTIVES: To study the influence of pharmacist mediated medication counseling on illness related factual knowledge, perceptions, and medication adherence behavior in hypertensive patients of a South Indian Tertiary care Teaching Hospital. **METHODS:** The Present study was a one year prospective open label study. Institutional Ethical committee has approved the study. Eligible patients were enrolled after collecting the written informed consent. A suitably designed and validated KAP questionnaire was applied to assess the illness related factual knowledge, practices to manage the disease and its complications at base line and at final follow up after 120 days. Structured medication counseling was provided to all patients at first follow up and subsequent 3 follow ups. Brief Medication Questionnaire (BMQ), Pill count and Patient diary methods were applied at base line and subsequent follow ups of 30 days gap to assess the medication adherence behavior in the enrolled patients. Blood pressure was recorded at base line and at each follow up during the study period. Student's t test was applied to assess the influence of medication counseling on KAP and medication adherence behavior. **RESULTS:** During the study period 76 eligible patients (Male: 43& female: 33) completed all the study follow ups. A highly significant improvement (p<0.01) in the knowledge, attitude and practice of patients was observed at the final follow up compared to base line. A significant improvement (p<0.05) was observed in all screens of BMQ and significant improvement (p,0.05) was observed in both systolic and diastolic blood pressures. **CONCLUSIONS:** Pharmacist mediated medication counseling has improved patients' knowledge, attitude and practices towards the disease and medication adherence behavior and clinical outcomes

PHS55

GENERATING UTILITY VALUES FOR USE IN COST-UTILITY ANALYSES OF DELIRIUM INTERVENTIONS

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OBJECTIVES: Delirium is common in hospitalised older patients with medical and surgical conditions, leads to poor outcomes and is an increasing burden on health care resources. A systematic review yielded no utility values for this population. The objective was to generate utility values to parameterise cost-utility decision models of delirium interventions in hospitalised elderly. **METHODS:** A literature review identified only one study that: a) captured delirium diagnoses; b) employed a multi-attribute utility (or convertible) measure. The study included hip fracture and hip surgery patients in Sweden (n=115; mean age=83) and collected SF-36 data (admission and 6 months) and delirium diagnoses (n=32; 12.5% of these had delirium on discharge). The study author supplied the data and pre- and post-delirium utility values were calculated using i) SF-6D conversion ii) published EQ-5D mapping algorithm. **RESULTS:** Pre-delirium utility differences between No Delirium and Delirium groups on admission were not in the expected direction but were non-significant. Mean(SD) SF-6D utility values were: Admission=0.598(115) and 0.623(081); 6 months=0.653(144) and 0.618(122), respectively for No Delirium and Delirium. Mapped EQ-5D scores were: Admission=0.544(.198) and 0.607(.136); 6 months=0.645(.224) and 0.586(.189), respectively for No Delirium and Delirium. Mean Admission-6 month changes were: (SF-6D) 0.055 and -0.005; (EQ-5D) 0.101 and -0.021 for No Delirium and Delirium, respectively. Thus according to both estimates, utility improved for those with no delirium but deteriorated for those who experienced delirium. **CONCLUSIONS:** Delirium has a lasting negative impact on patient utility. The utility values presented will be useful for future cost-utility analyses of delirium interventions targeting hip fracture. Assumptions are still required when populating health states and modelling lifetime impact as utility assessment during the delirium episode is not possible and longer term values are not available. Thus estimates at 1, 3 and post 6 months would provide a fuller picture of outcomes.

PHS56

EUROQOL (EQ-5D) HEALTH UTILITY SCORES IN POST-TRAUMATIC STRESS DISORDER (PTSD) PATIENTS: RESULTS FROM A DOUBLY RANDOMIZED PREFERENCE TRIAL (DRPT)

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OBJECTIVES: To assess health-utility scores associated with currently diagnosed PTSD, types of therapy (psychotherapy or pharmacotherapy), treatment choices (giving patients an opportunity to choose treatment or assigning treatment to patients), and treatment response. **METHODS:** Two hundred patients with PTSD enrolled in a DRPT examining the treatment and treatment-preference effects between prolonged exposure therapy (PE) and pharmacotherapy with sertraline

(SER). Patients were randomized to choice arm ($n = 97$) and no-choice arm ($n = 103$). In the choice arm, patients chose their preferred treatment either PE ($n = 61$) or SER ($n = 36$). While in the no-choice arm, patients were randomly assigned to either PE ($n = 48$) or SER ($n = 55$). Health utility was measured using the EQ-5D instrument at baseline and 10-week post-treatment. The EQ-5D index scores were generated using the U.S. general population-based models: D1 and MM-OC. Health utilities associated with treatments, treatment choices, and treatment response were estimated using multivariate regression. **RESULTS:** At baseline, mean EQ-5D utility scores (SD) associated with currently diagnosed PTSD were 0.630 (0.191) and 0.682 (0.239) using D1 and MM-OC models, respectively. At post-treatment, mean difference in EQ-5D scores between PE and SER using D1 and MM-OC models were 0.144 ($p < 0.001$) and 0.180 ($p < 0.001$), respectively. Mean difference in EQ-5D scores between giving choices of treatment and assigning to treatment were 0.064 ($p = 0.08$) and 0.089 ($p < 0.05$) for D1 and MM-OC models, respectively. For treatment response, mean difference in EQ-5D scores between responders and non-responders using D1 and MM-OC models were 0.255 ($p < 0.001$) and 0.295 ($p < 0.001$), respectively. **CONCLUSIONS:** Psychotherapy, giving patients an opportunity to choose their treatment, and response to therapy are associated with increased health utilities. Health utility estimates from the current study can be applied to conduct cost-effectiveness analyses.

PHS57

HEALTH-RELATED QUALITY OF LIFE (HRQOL) IN COLORECTAL CANCER PATIENTS WHO FINISH THEIR TREATMENT IN A TERTIARY HOSPITAL

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OBJECTIVES: To determine the HRQOL scores in colorectal patients treated with a curative intent as outpatients after having completed their treatment in a tertiary hospital. **METHODS:** We selected patients with colorectal cancer, treated with a curative intent. At the end of the treatment we applied the EORTC questionnaires: QLQ-C30, QLQ-CR29 and IN-PATSAT32. The mean and standard deviation were calculated. The scores for questionnaires were calculated with formulas and instructions according to EORTC Scoring Manual. The scores were correlated through Pearson's R test. **RESULTS:** Global health status/QoL showed a mean score of 88.26 (± 16.99); the other means were: role functioning 97.73 (± 7.79), emotional functioning 84.09 (± 13.34), diarrhoea 15.15 (± 26.68), constipation 13.64 (± 19.68), urinary frequency 22.73 (± 29.34), abdominal pain 7.58 (± 14.30), bloating 7.58 (± 14.30), dry mouth 9.09 (± 18.35), sore skin 15.15 (± 32.08), stoma care problems 16.67 (± 25.20). In the satisfaction questionnaire, the scores for doctors showed: technical skills 90.15 (± 15.14) and information provision 90.91 (± 16.65), for nurses: technical skills 76.89 (± 24.25) and information provision 68.94 (± 25.22), access 58.52 (± 23.90), waiting times 54.55 (± 26.32), comfort/cleanliness 61.36 (± 31.55) and general satisfaction 72.73 (± 25.48). We also documented associations between physical functioning and body surface (rP 0.52; p 0.01), role functioning and carcinoembryonic antigen (rP 0.45; p 0.03), cognitive functioning and glucose serum levels (rP 0.51; p 0.01), pain and peripheral blood leucocyte count (rP 0.73; p 0.000), sexual interest (men) and albumin serum levels (rP 0.85; p 0.01), dry mouth and glucose serum levels (rP 0.55; p 0.008) and between flatulence and glucose serum levels (rP 0.47; p 0.026). **CONCLUSIONS:** Emotional functioning and psychological issues are not systematically treated at our institution. Satisfaction with doctors was better than with nurse personnel. Malnutrition impacts negatively both in role and sexual functioning in the colorectal cancer patients.

PHS58

DESIGNING A PATIENT PREFERENCES SURVEY ON SPECIALIST REFERRAL FOR TOTAL JOINT REPLACEMENT PATIENT CHOICE WITH ALTERNATIVE SPECIFICATIONS OF THE STATUS-QUO

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OBJECTIVES: Long waiting times for hip and knee total joint replacement (TJR) are a major concern in health care systems with universal health care coverage. Giving patients the option of choosing the next available surgeon, as opposed to waiting for a specific surgeon, may improve access to care. We measured patient preferences about referral choices and waiting times using a discrete choice experiment (DCE) survey. **METHODS:** The attributes and levels informing DCE choice tasks were derived through a literature review, clinical and policy experts, and seven focus groups in four Canadian centers. 176 consecutive patients referred to an orthopaedic surgeon for TJR at two sites completed the survey of 14 choice tasks, each with 5 attributes (reputation, process of referral from primary care to specialist, waiting time to consult, waiting time to surgery, travel time to hospital) and 3 to 6 attribute levels. We tested different specifications for the surgeon reputation attribute and two alternative specifications of status quo/opt-out to inform the full study. We estimated preferences using conditional logit regression. **RESULTS:** Poor surgeon reputation dominated in one of four survey versions. Using the remaining respondents ($n=135$), surgeon reputation was the most important attribute in each version. 'Not knowing' the surgeon reputation was as important as an 'excellent' reputation. The waiting time to surgery was the next most important attribute, and was more important than waiting time to consult and the remaining attributes. There was no statistically significant difference between 'waiting for a specific surgeon' or the 'next

available surgeon'. Preferences in alternative specifications of status quo/opt-out were statistically different. **CONCLUSIONS:** The surgeon reputation is a key element of surgeon selection, and patients are willing to choose the next available surgeon in order to reduce waiting times providing that they know the surgeon has at least a satisfactory reputation.

PHS59

PREFERENCES OF APPALACHIAN WOMEN FOR INTERVENTIONS STRATEGIES IN A MOBILE MAMMOGRAPHY PROGRAM

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OBJECTIVES: Rural Appalachian women are significantly more likely to never having had an age appropriate mammogram. The objectives of the study were to determine the information sources about mammography screening used by West Virginia women age 40 years and above, who have had their first mammogram at a mobile mammography unit. The types of targeted educational interventions accompanying the mobile mammography unit perceived as likely to be acceptable and effective with never screened women were also determined. **METHODS:** A qualitative study using structured telephone interviews of 16 women age 40 years and above who have had their first mammogram at a mobile mammography unit were conducted with a structured questionnaire. Participants received \$25 gift card for their time and participation. Transcripts were coded by two researchers to reduce bias. Thematic analysis of data was conducted to identify themes and sub-themes from the data collected. **RESULTS:** The information sources used by rural women included doctors (81.25%), materials from library (43.75%), health fairs (37.50%), internet (37.50%), local health center (25.0%), nurses (18.75%), hospital (6.25%) and senior centers (6.25%). Fifty-six percent of women specified using social media such as Facebook, and Linked-in to get information about mammography screening. Community-based health educational programs that could be held at public places such as a local library or church or work-sites and mailed educational material about mammography screening and its importance were perceived to be the most helpful interventions that could be developed around a mobile mammography program. **CONCLUSIONS:** The results of the study indicate the important role of health care providers in influencing women to get mammography screening. Community-based education programs and mailed education materials are likely to be the most effective interventions to increase first time mammography screening via a mobile mammography unit.

PHS60

ASSOCIATION BETWEEN COMORBID OBESITY WITH HEALTH STATUS, DISABILITY AND HEALTH-RELATED QUALITY OF LIFE IN A NATIONALLY REPRESENTATIVE TYPE 2 DIABETES MELLITUS POPULATION

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OBJECTIVES: To examine patterns of health status, disability, and health-related quality of life in type 2 diabetes mellitus (T2DM) patients by comorbid obesity using a nationally representative US sample. **METHODS:** The 2009 Medical Expenditure Panel Survey was analyzed to identify adults (≥ 20 years) with diabetes (ICD-9-CM: 250). T2DM was identified if one of the following criteria was met: 1) evidence of ≥ 1 oral or non-insulin injectable anti-diabetic medication; 2) diagnosis of diabetes after age 30; 3) diagnosis before age 30 and not on insulin monotherapy. Self-perceived health status, limitation in activities of daily living (ADL)/instrumental ADL (IADL), and physical/mental component summary scores from the SF-12 were examined and compared by the presence of obesity ($\text{BMI} \geq 30 \text{ kg/m}^2$). Linear and logistic regressions were performed to assess the association between obesity and these outcomes. Nationally representative estimates were produced by applying population weights accounting for the multi-stage sampling design. **RESULTS:** This study included 2,269 respondents with T2DM (representing 19.2 million T2DM patients in the US), 54.5% of whom were obese. Compared to non-obese T2DM patients, obese diabetics had a higher proportion of self-perceived fair/poor health (41.9% vs. 34.5%, $p < 0.01$) and limitations in IADL (12.1% vs. 8.7%, $p = 0.03$), and a lower SF-12 physical score (38.4 vs. 42.3, $p < 0.01$) while limitations in ADL and SF-12 mental score were similar. After adjusting for age, gender, race, income, insured status, and comorbidities, obese T2DM patients were more likely to have limitations in IADL ($\text{OR} = 1.89$, 95% $\text{CI}: 1.28-2.78$) and scored 4.3 points lower on the SF-12 physical component ($p < 0.01$) than non-obese patients, while no significant differences were found in reporting fair/poor health, limitations in ADL, and SF-12 mental score. **CONCLUSIONS:** T2DM patients with comorbid obesity had greater disability in IADL and worse physical health-related quality of life. The deleterious impact of obesity should be considered when managing T2DM patients.

PHS61

IMPACT OF SPORTS ON CHILDREN WITH HAEMOPHILIA IN TERMS OF THEIR HEALTH STATUS, HEALTH-RELATED QUALITY OF LIFE AND PHYSICAL PERFORMANCE

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Haemophilia, a congenital bleeding disorder with recurrent bleeding in joints and muscles, leads to arthropathy and disability. Sport is considered beneficial for children with haemophilia in terms of physical health, motor coordination and psychological equilibrium, which might reduce bleeding frequency. **OBJECTIVES:** To evaluate the impact of sport on health status, health-related quality of life (HRQoL) and physical performance in haemophilic children.